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09/672,200	09/27/2000	Gregory L. Slaughter	5181-57500	8325

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EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/672,200

Applicant(s)

SLAUGHTER ET AL.

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11,13-15,17,18,20-26,28-31,33-36,51,52,54-57,59 and 73-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-11,15,17,18,20-26,28,31,33-36,51,52,54-57 and 73-80 is/are rejected.
- 7) ☒ Claim(s) 13,14,29,30 and 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 2, 4-11, 13-15, 17-18, 20-26, 28-30, 31, 33-36, 51-52, 54-57, 59, and 73-80 are presented for the examination. Claims 3, 12, 16, 19, 27, 32, 37-50, 53, 58, 60-72 are cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 7-11, 17-18, 21-26, 33, 34, 51, 52, 56, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al (U S Pat. 5,218,699) in view of Roth et al (6,285,987 B1).

3. As to claim 1, Brandle teaches the invention substantially as claimed including: a method for remotely invoking functions (remote procedure calls) in a distributed computing environment, comprising:

a client (application 100) generating a message (remote procedure call), wherein the message includes information representing a computer programming language (high level language, col. 3, lines 37-39) method call (procedure block 52);
the client sending the message to a service (remote router application 118), wherein the service is configured to perform functions on behalf of the client (execute service procedures 126); and

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the service performing a function on behalf of the client in accordance with the information representing the computer programming language method call included in the message (execute service procedure 170, 172, See col. 7, line 4 - col. 8, line 4; fig. 4-6), Brandle teaches storing the generated results data (results) to a space service (queue 116) in the distributed computing environment; and the client accessing the stored results data from the space service (application retrieves results from the queue, col. 7, lines 33-36, 64-66; col. 10, lines 11-13).

4. Brandle do not explicitly teach providing an advertisement for the stored data to the client, wherein the advertisement comprises information to enable access by the client to the stored data, the client accessing the stored results data from the space service in accordance with the information in the provided advertisement. However, Roth teaches providing an advertisement for the stored data to the client, wherein the advertisement comprises information to enable access by the client to the stored data, the client accessing the stored results data from the space service in accordance with the information in the provided advertisement (the web page 12 is transmitted to browser 11 in a conventional manner. Web page 12 includes an HTML reference to a file (i.e. an advertisement) located on an advertising web server system 16, col 3, In 35-40/ When a viewer 10 accesses web page 12, which has an HTML reference to server system 16, the present invention determines which advertisement from data base 16 A to present to the viewer, col 4, In 58-62/ access web page, such as web page 12, which in turn has an HTML reference to file (i.e. advertisement) stored on a server such as advertising server system 16, col 6, In 7-11/ the web server 310 provides an advertisement to web client browser 11 in response to an HTML reference. Such an operation is conventional. The function of the present invention to determine which particular advertisement from data base 16 A will be provided in

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response to each HTML reference from web client browser 11 to web server 310, col 46-52).

When client access to an HTML in the webpage 12(an advertisement). This means the client access to the data base 16A of server system 16 because HTML reference to a file (i.e. an advertisement) stored on a server.

5. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Brandle and Roth because Roth's providing an advertisement for the stored data to the client, wherein the advertisement comprises information to enable access by the client to the stored data, the client accessing the stored results data would improve the efficiency of Brandle's system by providing a very flexible system whereby advertises can minimize cost and maximize effectiveness while the owner of web sites can obtain the highest possible to access to the storage.

6. **As to claim 2**, Brandle teaches the service performs the function on behalf of the client asynchronously to processing on the client (asynchronous mode). Col. 9, line 31 -col. 10, line 18.

7. **As to claim 7**, Brandle teaches the service comprises one or more computer programming language methods executable within the service (service procedures 126), wherein said performing a function comprises executing a computer programming language method in accordance with the information representing the computer programming language method call included in the message (procedure and parameters). Col. 8, line 57 - col. 9, line 19.

8. **As to claim 8**, note discussion of claim 7 and Brandle further teaches the information representing the computer programming language method call includes an identifier of the method call (procedure/call identifier), and wherein said performing a function comprises: regenerating the method call in accordance with the identifier of the method call included in the

information representing the method call (extract cal identifier and parameters and invokes, col. 9, lines 1-16); and executing a computer programming language method in accordance with the regenerated method call (execute service procedures 126, step 172).

9. **As to claim 9**, Brandle teaches the information representing the computer programming language method call further includes one or more parameter values of the method call (parameter block 58), and providing the one or more parameter values from the information representing as parameter values of the method call (mapper extracts data/parameters). Col. 9, lines 9-16.

10. **As to claim 10**, Brandle teaches a service method gate (remote muter application 118, data mapper 120 and service director 122) configured to provide an interface to computer programming language methods of the service by receiving messages (transferred) and invoking methods specified by the messages (steps 166, 168, 170, 172), and wherein said regenerating the method call is performed by the service method gate. Col. 8, line 57 - col. 9, line 19.

11. **As to claim 11**, Brandle teaches performing a function generates results data (results), the service providing the generated results data to the client (steps 174 -190).

12. **As to claim 17**, note discussions of claim 1 for functions of generate, send and perform and claim 3 for receive. In Brandle, the first two functions are provided in a client node and the last two in a service node. It would have been obvious to implement the client functions by a client device and the service functions by a service device.

13. **As to claims 18, 21, 22, 23-26**, they are apparatus claims of claims 2, 4, 5, 6, 7-9, 11; therefore, they are rejected for the same reasons as claims 2, 4, 5, 6, 7-9, 11 above.

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14. **As to claim 33**, it is an apparatus claim of claims 1 and 3; therefore, it is rejected for the same reasons as claims 1 and 3 above. In additional, Brandle teaches Note the equivalence and access/receiving. It would have been obvious to implement the client and the method gate functions, co-located in a client node, in a device.

15. **As to claim 34**, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

16. **As to claim 51**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, It would have been obvious to embody the method steps in a carrier medium for the purpose of portability.

17. **As to claims 52, 56, 57**, they are apparatus claims of claims 2, 3, 8, 9; therefore, they are rejected for the same reasons as claims 2, 3, 8, 9 above.

18. Claims **35, 36, 54, 55, 28, 73-76** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al (U S Pat. 5,218,699) in view of Roth et al (6,285,987 B1), as applied to claim 1 above, and further in view of Anderson et al (Professional XML, pages 497-511, 542-543).

19. **As to claims 73-76**, Brandle and Roth do not teach the computer programming language is Java, nor Java method call, Java method implemented on, Java method on. However, Anderson teaches a method for remotely invoking functions in a distributed computing environment (XML-RPC), wherein the computer programming language is Java, and including

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Java method call (Java client), Java method implemented on the service (Java XML-RPC server, page 511, fig.). See page 508 section XML-RPC to page 511, last para.

20. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine teaching of Brandle, Roth and Anderson because Anderson's the computer programming language is Java, nor Java method call, Java method implemented on, Java method on would improve the teaching of Brandle and Roth's system allowing the communications between programs running on disparate operating environments heterogeneous systems.

21. As to claim 28, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

22. As to claims 35, 36, 54, 55, Java is a well-known distributed object-oriented execution environment with remote procedure call capability, as taught by Anderson (page 511, fig.). In view of the combined teaching of Brandle and Anderson, running a client application/process in a virtual machine I JVM would have been obvious.

23. Claims 15, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al (U S Pat. 5,218,699) in view of in view of Roth et al (6,285,987 B1), as applied to claim 1 above, and further in view of Cuomo (U S Pat. 6,185,614).

24. As to claim 15, Brandle and Roth do not teach using Uniform Resource Identifiers (URLs) to access data/resources. However, Cuomo teaches using Uniform Resource Identifiers (URLs) to access data/resources (col. 4, lines 4-36).

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25. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Brandle, Roth and Cuomo because Cuomo's teaches using Uniform Resource Identifiers (URLs) to access data/resources would improve the efficiency of Brandle and Roth's systems by providing the capability of returning dynamically generated results.

26. As to **claims 31**, Cuomo teaches using Uniform Resource Identifiers (URLs) to access data/resources (col. 4, lines 4-36).

27. Claims **77-80, 4, 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al (U S Pat. 5,218,699) in view of Roth et al (6,285,987 B1) and further in view of in view of Humpleman et al (US. Patent 6,466,971 B1).

28. As to **claim 77**, Brandle and Roth do not teach the method gate in generated for the client according to a data representation language schema define one or more interface. However, Humpleman teaches the method gate in generated for the client according to a data representation language schema define one or more interface (controlled application 82, 84 are programmed using a standard interface subset of XML based XCE database 104. Each device interface is stored within said application 82, 84 in XML form, col 20, ln 23-27/ the controlled application 84 of device use XML parser 74 to parse and interpret the received XML command/ the XMLRPC codec 76, col 18, ln 45-50), Method gate receiving method call and method gate generating the message for the client (upon receiving said XMLRPC command message, the controlled application 84 of device B uses the XML parser 74 of device B to parse and interpret

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the received XML command message. The XMLRPC codec 76 of device B the decodes the parser results to obtain the method call, col 18, ln 45-52/col 16, ln 21-35), the programming language call in the message represents the method calls (obtain the method call information in the command message, including a method name and parameters for the device B function to perform request service, col 18, ln 50-53).

29. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Brandle, Roth and Humpleman because Humpeman's the method gate in generated a data representation language schema define one or more interface. Method gate receiving method call and method gate generating the message for the client would improve the efficiency of Brandle's system by providing the ability for various network devices to automatically command and control other various network devices.

30. As to **claim 4**, Brandle teaches the client method gate sending the message to the service (transfer data including service procedure). Col. 8, line 63 - col. 9, line 8.

31. As to **claims 20, 78-80**, they are apparatus claims of claims 2, 4, 77; therefore, they are rejected for the same reason as claims 2, 4, 77 above.

32. Claims **5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al (U S Pat. 5,218,699) in view of Roth et al (6,285,987 B1) in view of in view of Humpleman et al (US. Patent 6,466,971 B1), and further in view of further in view of Anderson et al (Professional XML, pages 497-511, 542-543).

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33. As to claims 5, 6, Brandle, Roth and Humpleman do not teach Java distributed object oriented execution environment with remote procedure call capability. However, Anderson teaches Java is a well-known distributed object-oriented execution environment with remote procedure call capability, as taught by Anderson (page 511, fig.). In view of the combined teaching of Brandle and Anderson, running a client application/process in a virtual machine I JVM.

34. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Brandle, Roth, Humpleman and Anderson because Anderson's Java distributed object oriented execution environment with remote procedure call capability would improve the efficiency of Brandle, Roth and Humpleman's systems by allowing communications between programs running on disparate operating environments heterogeneous systems.

Allowable Subject Matter

35. Claims 13, 14, 29, 30, 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to the argument:

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36. Applicant amendment filed on 08/21/2006 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) “ Brandle in view of Roth fails to teach or suggest storing the generated results data to space service in the distributed computing environment”/ “ queue 116 is not a service in distributed environment”.

(2) “ Brandle in view of Roth also fails to teach or suggest providing an advertisement for stored results data to the client, where the advertisement comprises information to enable access by the client to the stored result data”.

(3) “ providing a reference to a commercial advertisement based on various advertiser bids is completely different than storing generated results data to space service in a distributed computing environment where the results data were generated by performing a function on behalf of a client in accordance with information representing a computer programming language call”.

37. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Brandle teaches the response procedure 114 receives results returned over the network from a remote node and placed them into a queue 116 for later retrieval by the application 110(col 7, ln 34-39)/ Depending on the call method being used , the results returned by the application procedure 118 can be returned to the response procedure 114 for placement into the queue 116 or they can be returned directly to the remote router service produce(col 7, ln 64-68). The queue 116 is a space service in distributed computing environment since the results and information were passed from one service to the another server.

As to the point(2), Roth teaches the web page 12 is transmitted to browser 11 in a conventional manner. Web page 12 includes an HTML reference to a file (i.e. an advertisement) located on an advertising web server system 16(col 3, ln 35-40)/ When a viewer 10 accesses web page 12, which has an HTML reference to server system 16, the present invention determines which advertisement from data base 16 A to present to the viewer (col 4, ln 58-62)/ access web page, such as web page 12, which in turn has an HTML reference to file (i.e. advertisement) stored on a server such as advertising server system 16(col 6, ln 7-11)/ the web server 310 provides an advertisement to web client browser 11 in response to an HTML reference. Such an operation is conventional. The function of the present invention to determine which particular advertisement from database 16 A will be provided in response to each HTML reference from web client browser 11 to web server 310(col6, col 46-52).

As to the point (3), Brandle teaches the results were generated by performing a function on behalf of a client call and store the results in the queue for later retrieved by client (col 2, ln 35-45/ col 7, ln 34-38). Brandle does not teaches the advertisement comprise information to enable access by the client to stored results. However, Roth teaches When a viewer 10 accesses web page 12(advertisement), which has an HTML reference (information to enable access by the client to the stored results) to server system 16(stored results), the present invention determines which advertisement from data base 16 A to present to the viewer (col 4, ln 58-62). When client access to an HTML in the webpage 12(an advertisement). This means the client access to the data base 16A of server system 16 because HTML reference to a file (i.e. an advertisement) stored on a server. The advertisement of Roth can be used for many different purposes to

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improve the networking communication of Brandle. In additional, both Brandle and Roth related to the computer-networking communication.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

November 7, 2006


REGAL 11/9
SUPERVISORY PATENT EXAMINER
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